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NOTICE OF ALLOWANCE AND FEE(S) DUE

05514

7590

04/01/2003

FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 EXAMINER

NGUYEN, LAMSON D

ART UNIT CLASS-SUBCLASS

2861 347-040000

DATE MAILED: 04/01/2003

| A | PPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|----------------|-------------|----------------------|---------------------|------------------|
| | 09/742,431 | 12/22/2000 | Mineo Kaneko | 684.3120 | 8878 |

TITLE OF INVENTION: LIQUID EJECTING RECORDING HEAD AND LIQUID EJECTING RECORDING APPARATUS

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1300 | \$300 | \$1600 | 07/01/2003 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>, THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Box ISSUE FEE

Commissioner for Patents Washington, D.C. 20231

(703)746-4000 Fax

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as including the patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address; and/or (h) indicating a corrected below or directed otherwise in Plack 1, by (a) specifying a new correspondence address; and/or (h) indicating a corrected below or directed otherwise in Plack 1, by (a) specifying a new correspondence address; and/or (h) indicating a corrected below.

| ndicated unless corrected b naintenance fee notification | | e in Block 1, by (a) spe | ecifying a new co | orrespondence addr | ess; and/or (b) indicating a sepa | rate "FEE ADDRESS" to |
|--|---|---|--|---|--|--|
| | E ADDRESS (Note: Legibly mark- | | llock T) | Note: A certificat Fee(s) Transmit | te of mailing can only be used fo tal. This certificate cannot l apers. Each additional paper, s | r domestic mailings of the be used for any other |
| | CELLA HARPER & | | | formal drawing, | apers. Each additional paper, s must have its own certificate of n | uch as an assignment or nailing or transmission. |
| 30 ROCKEFELLE | | | | | Certificate of Mailing or Trans | mission |
| NEW YORK, NY | 10112 | | | I hereby certify United States Pos envelope address | that this Fee(s) Transmittal is stal Service with sufficient postage ted to the Box Issue Fee address USPTO, on the date indicated by | being deposited with the ge for first class mail in an above, or being facsimile |
| | | | | transmitted to the | OSF 10, on the date indicated of | (Depositor's name |
| | | | | | | (Signature |
| | | | | | | (Date |
| | | | | | | |
| APPLICATION NO. | FILING DATE | FIRS | T NAMED INVEN | TOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/742,431 | 12/22/2000 | | Mineo Kaneko | P DECORDING AT | 684.3120 | 8878 |
| TITLE OF INVENTION: LI | QUID EJECTING RECO | RDING HEAD AND LI | OID EJECTING | RECORDING AF | PARATUS | |
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| nonprovisional | NO | \$1300 | | \$300 | \$1600 | 07/01/2003 |
| EXAMIN | IER | ART UNIT | CLASS-SUBCI | LASS | • | |
| NGUYEN, LA | MSON D | 2861 | 347-04000 | 00 | | |
| 1. Change of corresponden | ce address or indication of | "Fee Address" (37 | 2. For printing | on the patent from | nt page, list (1) | |
| CFR 1.363). | | , | the names of up to 3 registered patent attorneys | | | |
| Change of corresponde Address form PTO/SB/12 | nce address (or Change of | Correspondence | or agents OR, alternatively, (2) the name of a single firm (having as a member a registered | | | |
| "Fee Address" indication | on (or "Fee Address" Indic | ation form | | ent) and the name at attorneys or ages | | |
| PTO/SB/47; Rev 03-02 of Number is required. | or more recent) attached. U | se of a Customer | is listed, no name will be printed. | | | |
| B. ASSIGNEE NAME AND | RESIDENCE DATA TO | BE PRINTED ON THE | PATENT (print o | or type) | | |
| DI DACE MOTE: Unless as | n acciunce is identified be | low no assignee data wi | ill annear on the i | natent Inclusion of | f assignee data is only appropriat | e when an assignment has |
| been previously submitted (A) NAME OF ASSIGNED | | | | on of this form is N Y and STATE OR (| OT a substitute for filing an assig COUNTRY) | ment. |
| (A) WHAL OF HOSIONES | | (2) | | | , | |
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| Please check the appropriate | assignee category or categ | gories (will not be printed | d on the patent) | individual | Corporation or other private gr | roup entity 🚨 governmen |
| a. The following fee(s) are | enclosed: | 4b. Pay | ment of Fee(s): | | | |
| ☐ Issue Fee | | | | t of the fee(s) is end | | • |
| ☐ Publication Fee | | | yment by credit card. Form PTO-2038 is attached. e Commissioner is hereby authorized by charge the required fee(s), or credit any overpayment, to sit Account Number(enclose an extra copy of this form). | | | |
| Advance Order - # of C | opies | Deposi | t Account Number | er | (enclose an extra copy of this | form). |
| Commissioner for Patents is | requested to apply the Issu | e Fee and Publication Fe | eė (if any) or to re | e-apply any previou | usly paid issue fee to the applicati | ion identified above. |
| | | | | T- | | |
| (Authorized Signature) | | (Date) | | | | |
| NOTE; The Issue Fee and | Publication Fee (if requ | ired) will not be accept | ed from anyone | | | |
| other than the applicant; | a registered attorney or a | igent; or the assignee of Patent and Trademark O | r other party in | | | |
| interest as shown by the records of the United States Patent and Trademark Office This collection of information is required by 37 CFR 1.311. The information i obtain or retain a benefit by the public which is to file (and by the USPTO tapplication. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This estimated to take 12 minutes to complete, including gathering, preparing, and st completed application form to the USPTO. Time will vary depending upon to case. Any comments on the amount of time you require to complete this suggestions for reducing this burden, should be sent to the Chief Information of Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. ONOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. | | | | | •• | |
| obtain or retain a benefit application. Confidentiality | This collection is | | | | | |
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| case. Any comments on suggestions for reducing t | the amount of time you his burden, should be sen | require to complete the to the Chief Information | on Officer, U.S. | | | |
| Patent and Trademark Off NOT SEND FEES OR | ce, U.S. Department of C COMPLETED FORMS | ommerce, Washington, S TO THIS ADDRES | S. SEND TO: | | • | |
| Commissioner for Patents, | Washington, DC 20231. | | | | | |

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United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20221 www.uspta.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-------------------|----------------------|-------------------------|------------------|--|
| 09/742,431 12/22/2000 Mineo K | | Mineo Kaneko | 684.3120 8878 | | |
| 05514 7: | 590 04/01/2003 | | EXAMIN | ER | |
| | CELLA HARPER & SC | INTO | NGUYEN, LAMSON D | | |
| 30 ROCKEFELLER PLAZA NEW YORK, NY 10112 | | | ART UNIT | PAPER NUMBER | |
| UNITED STATES | | | 2861 | | |
| | | | DATE MAILED: 04/01/2003 | | |

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

| | Application | No. | Applicant(s) | * | | |
|--|--|---|--|--------------|--|--|
| 1 A | 09/742,431 | | KANEKO ET AL. | | | |
| Notice of Allowability | Examiner | - | Art Unit | | | |
| | Lamson D No | nuven | 2861 | | | |
| | Lamson D No | Juyen | 2001 | 1 | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. | | | | | | |
| 2. | The drawings filed on <u>22 December 2000</u> are accepted by the Examiner. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| International Bureau (PCT Rule 17.2(a)). | cuments nave | been received in this i | iational stage applica | idon nom the | | |
| * Certified copies not received: | | | | | | |
| Acknowledgment is made of a claim for domestic priority ur | nder 35 U.S.C. | & 119(e) (to a provision | onal application) | | | |
| (a) The translation of the foreign language provisional a | | | onal application). | | | |
| 6. Acknowledgment is made of a claim for domestic priority ur | • • | | | | | |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. | | | | | | |
| 8. CORRECTED DRAWINGS must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No (b) including changes required by the proposed drawing correction filed, which has been approved by the Examiner. (c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No | | | | | | |
| Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson. | | | | | | |
| 9. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) Information Disclosure Statements (PTO-1449), Paper No | | 2☐ Notice of Informa 4☐ Interview Summa 6☐ Examiner's Amer 8⊠ Examiner's State 9☐ Other | ary (PTO-413), Paper adment/Comment | No | | |
| | | | | | | |

Application/Control Number: 09/742,431

Art Unit: 2861

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

* the primary reason for the allowance of claims 1-23 is the inclusion of the limitation of an ink jet printhead comprising a first nozzle array group and a second nozzle array group, wherein the first group comprising a first array ejecting a first liquid and a second array ejecting a second liquid and the second group comprising a third array ejecting the first liquid and a fourth array ejecting the second liquid, and wherein the first array and the second array are aligned in the scanning direction and the third array and the fourth array are aligned in the scanning direction and the first and the third array are adjacent to each other and the the nozzles of the first array and the nozzles of the third array are disposed with a deviation in the subscanning direction so as to be complementary to each other in the scanning direction. It is this limitation found in each of the claims, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lamson D. Nguyen whose telephone number is (703)306-4547.

LAMSON NGUYEN PRIMARY EXAMINER



Creation date: 03-22-2004

Indexing Officer: TMCNEILL - TREMAIN MCNEILL

Team: OIPEBackFileIndexing

Dossier: 09742431

Remarks:

Legal Date: 01-16-2002

| No. | Doccode | Number of pages |
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| 3 | 1449 | 3 |

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| 3 | 1449 | 3 | | | |
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| Total number of pages: 11 | | | | | |

Order of re-scan issued on